

independent claim 10 includes a trace that is coupled to a bond pad and extends away from the bond pad. The trace applies an attractive force to solder that is placed on the bond pad. In addition, claim 10 includes an element to counteract the attractive force applied by the trace. The attractive force and counteractive attractive force recited in claims 1 and 10 arise from a region of the trace and the trace stub or the element that is exposed. In other words, an exposed portion of a trace attracts solder deposited on a bond pad toward the trace. Further, an exposed portion of a trace stub or an element also attracts the solder toward it. Thus, the trace and the trace stub or element may be arranged so that the forces counteract each other.

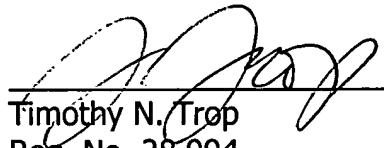
The prior art does not teach an exposed region of a trace and a trace stub or an element. Rather, the prior art teaches an exposed interconnect pad with a solder ball placed thereon. Additionally, the prior art shows a trace and a remnant thereof connected to the interconnect pad. See Figure 1. However, the mere fact that a circuit trace and a trace remnant are connected to an interconnect pad does not mean that the trace and remnant apply attractive forces to solder deposited on the pad. For a force to be applied to the solder, the circuit trace and trace remnant must be exposed. As explained in detail in the Reply to Paper No. 5, Healy et al. do not teach an exposed circuit trace or a remnant thereof. Instead, Healy et al. merely teach an exposed interconnect pad. Thus, Healy et al.'s circuit trace and remnant can not apply an attractive force and counteractive attractive force respectively, to solder deposited on the interconnect pad. As such, the Examiner's conclusion that Healy et al.'s structure must provide the same functionality as the claimed invention is in error. See Paper No. 7, page 3.

Thus, the Applicant respectfully requests that the Examiner withdraw his rejection. Accordingly, the application is in condition for allowance and the Examiner's prompt action toward that end is respectfully requested. Proposed drawing changes to overcome the drawing objections are attached.

No additional fee is believed to be required due to this response. The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 20-1504 (MICT-0050-US).

Respectfully submitted,

Date: 7/19/01



Timothy N. Trop
Reg. No. 28,994
TROP, PRUNER & HU, P.C.
8554 Katy Freeway, Ste. 100
Houston, TX 77024
713/468-8880 [Phone]
713/468-8883 [Fax]

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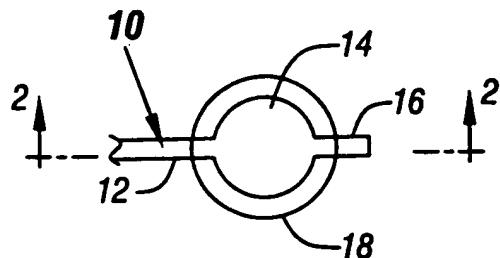


FIG. 1

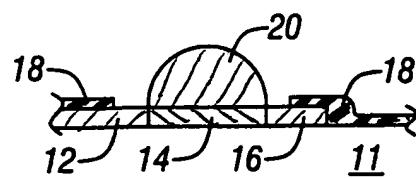


FIG. 2

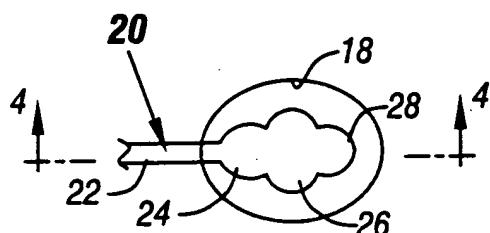


FIG. 3

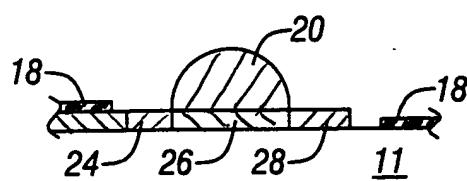


FIG. 4

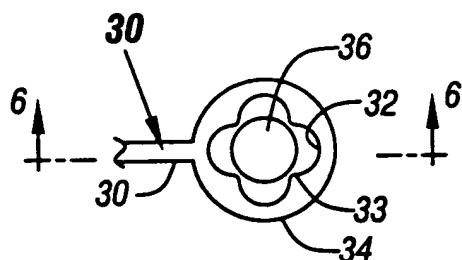


FIG. 5

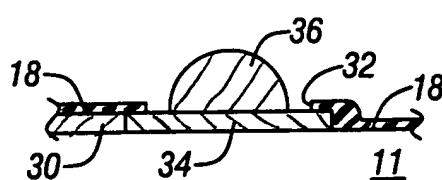


FIG. 6

Approved
by
H. C. D.

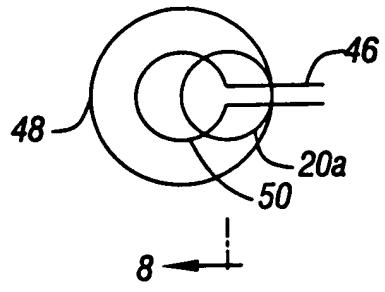
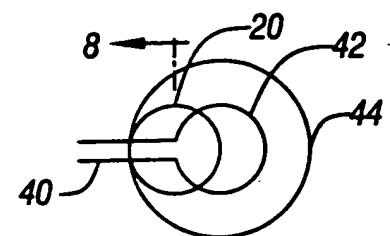


FIG. 7

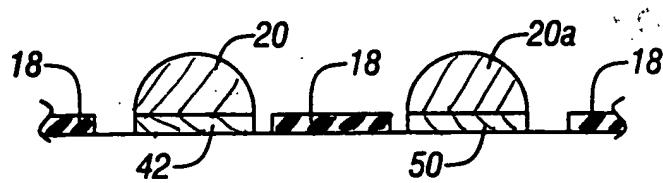


FIG. 8

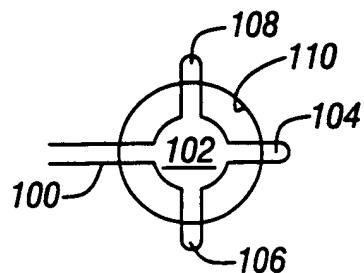
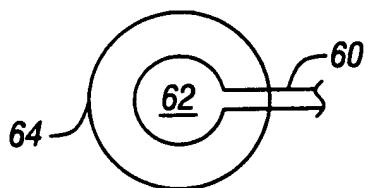
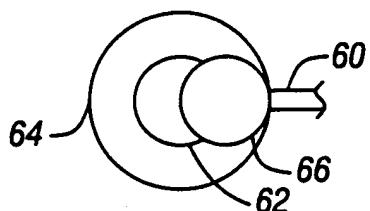


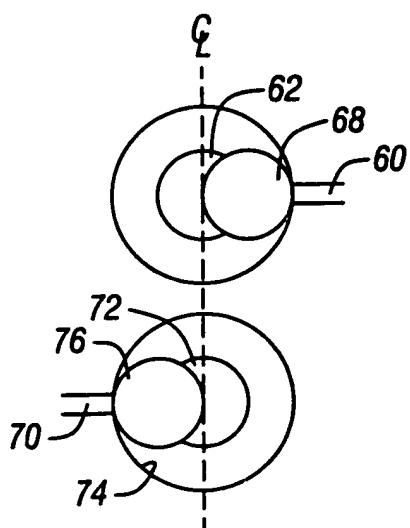
FIG. 9



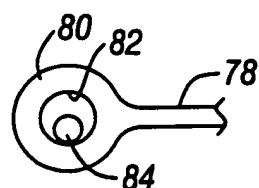
**FIG. 10
(PRIOR ART)**



**FIG. 11
(PRIOR ART)**



**FIG. 12
(PRIOR ART)**



**FIG. 13
(PRIOR ART)**

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